

# ABSTRACT

A transistor can be fabricated to exhibit reduced channel hot carrier effects.

According to one aspect of the present invention, a method for fabricating a transistor structure includes implanting a first dopant into a lightly doped drain (LDD) region to form a shallow region therein. The first dopant penetrates the substrate to a depth that is less than the LDD junction depth. A second dopant is implanted into the substrate beyond the LDD junction depth to form a source/drain region. The implantation of the second dopant overpowers a substantial portion of the first dopant to define a floating ring in the LDD region that mitigates channel hot carrier effects.

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